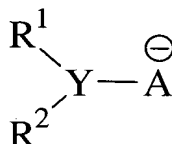


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A composition of matter comprising a [[A]] ligand having the formula:



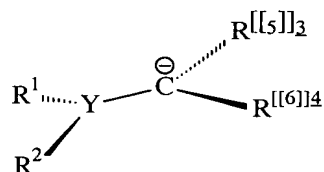
where

A is CH₂, CHR³, CR³R⁴, NR³, O, S, or PR³;

R¹ and R² are independently hydrogen, aryl, C₆₋₁₅ diarylphospho, C₁₋₁₈ alkylthio, C₆₋₁₅ arylthio, C₇₋₁₅ aralkyl, C₁₋₁₀ alkoxy, C₆₋₁₄ aryloxy, C₁₋₁₀ dialkylamino, or C₆₋₁₅ diarylamino; R³ and R⁴ are independently hydrogen, C₁₋₈ alkyl, C₆₋₁₀ aryl; and

Y is B, Al, or Ga.

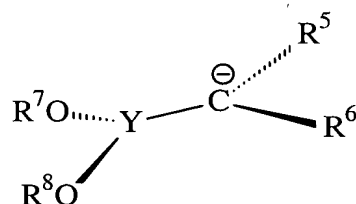
2. (currently amended) The ~~ligand~~ composition of claim 1 wherein said ligand has ~~having~~ the formula:



where

~~R⁵ and R⁶ are independently hydrogen, C₁₋₈ alkyl, C₆₋₁₀ aryl, C₇₋₁₅ aralkyl, C₁₋₁₀ alkoxy, C₆₋₁₄ aryloxy, C₁₋₁₀ dialkylamino, or C₆₋₁₅ diarylamino.~~

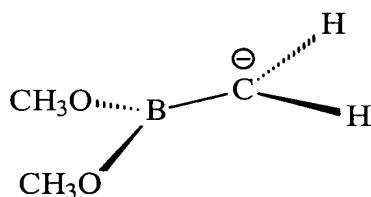
3. (currently amended) The ligand composition of claim 1 wherein said ligand has having the formula:



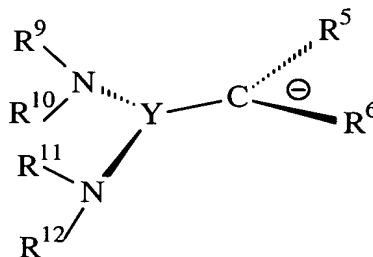
where

R⁷ and R⁸ are independently C₁₋₈ alkyl, C₆₋₁₀ aryl, or C₇₋₁₅ aralkyl.

4. (currently amended) The ligand composition of claim 3 wherein said ligand has having the formula:



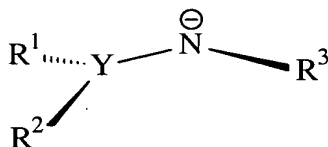
5. (cancelled)
6. (currently amended) The composition ligand of claim 2 wherein said ligand has having the formula:



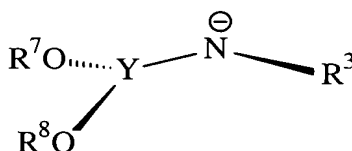
where

R⁹, R¹⁰, R¹¹, and R¹² are independently C₁₋₈ alkyl, C₆₋₁₀ aryl, or C₇₋₁₅ aralkyl.

7. (currently amended) The ~~ligand~~ composition of claim 1 wherein said ligand has having the formula:



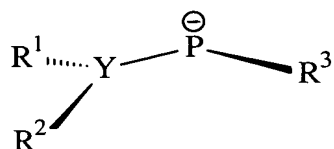
8. (currently amended) The ~~ligand~~ composition of claim 7 wherein said ligand has having the formula:



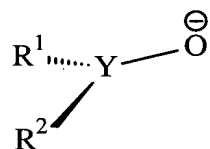
where

R⁷ and R⁸ are independently C₁₋₈ alkyl, C₆₋₁₀ aryl, or C₇₋₁₅ aralkyl.

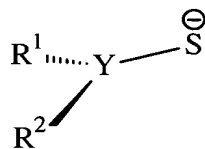
9. (currently amended) The composition ~~ligand~~ of claim 1 ~~having~~ wherein said ligand has the formula:



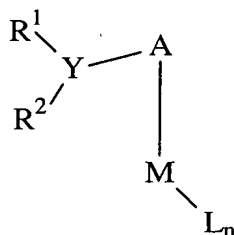
10. (currently amended) The ~~ligand~~ composition of claim 1 wherein said ligand has ~~having~~ the formula:



11. (currently amended) The ~~ligand~~ composition of claim 1 ~~having~~ wherein said ligand has the formula:



12. (currently amended) A polymerization catalyst ~~containing~~ comprising a compound ~~ligand of claim 1, and~~ having the formula:



where

M is a transition metal;

L is a sigma bonded or pi bonded ligand;

n is an integer such that the valency of M is satisfied;

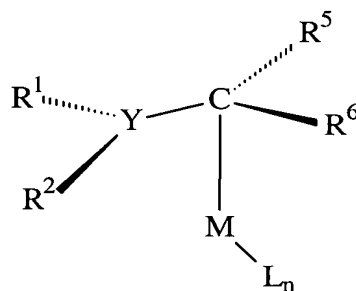
A is CH_2 , CHR^3 , CR^3R^4 , NR^3 , O, S, and PR^3 ;

R^1 and R^2 are independently hydrogen, aryl, C_{6-15} diarylphospho, C_{1-18} alkylthio, C_{6-15} arylthio, C_{7-15} aralkyl, C_{1-10} alkoxy, C_{6-14} aryloxy, C_{1-10} dialkylamino, or C_{6-15} diarylamino;

R^3 and R^4 are independently hydrogen, C_{1-8} alkyl, C_{6-10} aryl, C_{7-15} aralkyl, C_{1-10} alkoxy, C_{6-14} aryloxy, C_{1-10} dialkylamino, or C_{6-15} diarylamino; and

Y is B, Al, or Ga.

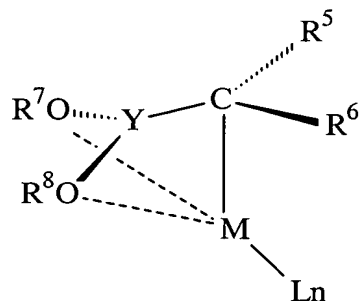
13. (currently amended) The polymerization catalyst of claim 12 wherein
said compound has ~~having~~ the formula:



where:

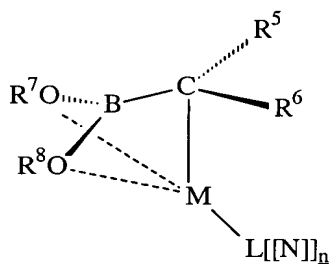
R^5 and R^6 are independently hydrogen, a C_{1-8} alkyl group, C_{6-10} aryl group, C_{7-15} aralkyl group, C_{1-10} alkoxy group, C_{6-14} aryloxy group, C_{1-10} dialkylamino group, or C_{6-15} diarylamino group.

14. (currently amended) The polymerization catalyst of claim 12 wherein
said compound has ~~having~~ the formula:

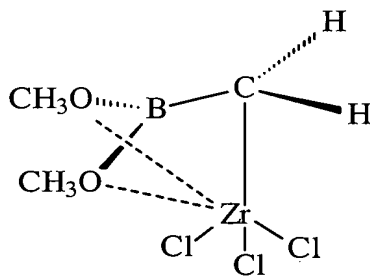


where R⁷ and R⁸ is hydrogen, a C₁₋₈ alkyl group, C₆₋₁₀ aryl group, or C₇₋₁₅ aralkyl group.

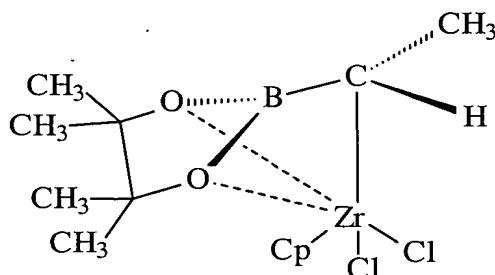
15. (currently amended) The catalyst of claim 12 wherein said compound
has having the formula:



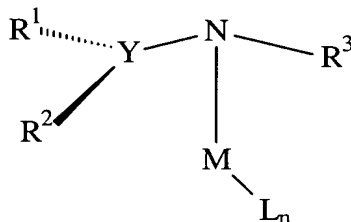
16. (currently amended) The catalyst of claim 12 wherein said compound
has having the formula:



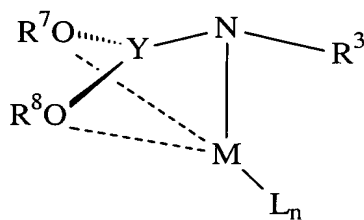
17. (currently amended) ~~The A catalyst comprising a compound of claim~~
~~12~~ having the structure:



18. (currently amended) The catalyst of claim 12 ~~having~~ wherein said
compound has the formula:



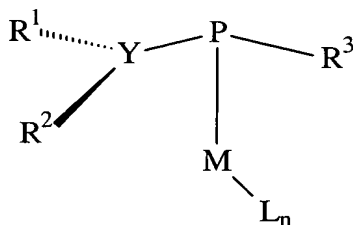
19. (currently amended) The catalyst of claim 12 ~~having~~ wherein said
compound has the formula:



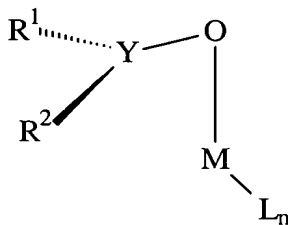
where

R⁷ and R⁸ are independently a C₁₋₈ alkyl group, C₆₋₁₀ aryl group, or C₇₋₁₅ aralkyl group.

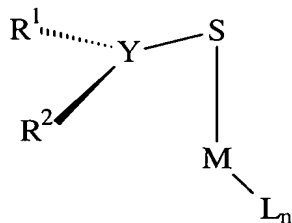
20. (currently amended) The catalyst of claim 12 ~~having~~ wherein said compound has the formula:



21. (currently amended) The catalyst of claim 12 ~~having~~ wherein said compound has the formula:



22. (currently amended) The catalyst of claim 12 ~~having~~ wherein said compound has the formula:

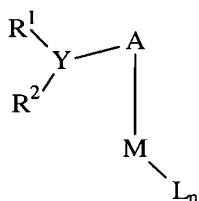


23. (original) A process for the oligomerization or polymerization of at least one α -olefin, said process comprising polymerizing said at least one α -olefin in the

presence of a polymerization catalyst component comprising the polymerization catalyst of claim 12.

24. (original) A polyolefin or oligoolefin prepared by the process of claim 23.

25. (new) A polymerization catalyst containing a ligand of claim 1, and having the formula:



where

M is a transition metal;

L is a sigma bonded or pi bonded ligand;

n is an integer such that the valency of M is satisfied;

A is CH₂, CHR³, CR³R⁴, NR³, O, S, and PR³;

R¹ and R² are independently hydrogen, aryl, C₆₋₁₅ diarylphospho, C₁₋₁₈ alkylthio, C₇₋₁₅ aralkyl, C₁₋₁₀ dialkylamino, or C₆₋₁₅ diarylamino; wherein R¹ and R² may be bonded to form a cyclic structure;

R³ and R⁴ are independently hydrogen, C₁₋₈ alkyl, C₆₋₁₀ aryl, C₇₋₁₅ aralkyl, C₁₋₁₀ alkoxy, C₆₋₁₄ aryloxy, C₁₋₁₀ dialkylamino, or C₆₋₁₅ diarylamino; and

Y is B, Al, or Ga.